

New Academic Program: BA/BS in Marine Studies (MAST)

Program Proposed Start Date

Winter 2021

Program Description

Marine studies is an interdisciplinary field of study that explores the dynamic relationship between people and the marine environment. As anthropogenic impacts expand from heavily populated coasts to remote regions of the ocean (e.g., deep sea, areas beyond national jurisdiction, etc.) the marine world has become a literal as well as symbolic last frontier for exploration and exploitation. Unraveling the complex dynamics of how people affect the ocean and, in turn, how the ocean affects humans, is more essential than ever.

The BA/BS in Marine Studies (MAST) degree, to be offered at OSU-Corvallis, will emphasize the human dimensions of understanding the ocean and coasts while building on foundational knowledge about their scientific characteristics. Teaching in the social sciences, policy, arts, and humanities — based mainly but not exclusively in the College of Liberal Arts (CLA) — will together provide a deep understanding of the complex social, cultural, historical, and economic nature of the marine environment.

OSU's existing marine-related programs in the natural sciences will strongly complement (and be complemented by) this degree, including through required courses that provide marine studies students with essential knowledge in ocean sciences. Overall, the MAST degree focuses on development of: 1) liberal arts-based interdisciplinary understanding and collaborative problem-solving skills; 2) comprehensive ocean literacy as it relates to current and future issues interconnected with natural and social systems in the marine environment, and; 3) community-based engagement skills through immersive coastal experiences and work.

Program Context

Housed in the College of Liberal Arts, the Bachelor of Arts/Bachelor of Science (BA/BS) in Marine Studies will provide students with conceptual foundations, immersive experiences, and professional skills in the liberal arts-based areas of particular importance to marine studies, while drawing on OSU's strengths in the natural sciences. Coastal experiential learning requirements are one of several signature elements of this degree and will be offered at the Hatfield Marine Science Center (HMSC) or on the Corvallis campus with a significant course dimension involving integration with HMSC.

This proposed degree will be housed centrally in CLA, with dedicated faculty FTE for program oversight and coordination. A small Marine Studies Degree Program Coordinating and Oversight Committee (0.10 FTE per faculty member) and a Program Coordinator (0.50 FTE) will provide support in conjunction with CLA leadership and

implement mechanisms for fostering communication and collaboration among MAST-affiliated faculty who are developing and delivering foundational and core courses. This committee will also include curricular partners outside of CLA to promote cross-college communication and coordination.

Program Purpose/Relationship to University Mission/Strategic Plan

The proposed program in marine studies supports the university's mission as stated in Strategic Plan 4.0: Marine studies "promotes economic, social, cultural and environmental progress for the people of Oregon, the nation and the world."

The marine studies undergraduate degree program foregrounds the signature areas of OSU's strategic plan — advancing the science of sustainable earth ecosystems, improving human health and wellness, and promoting economic prosperity and social progress — as the institution's greatest opportunities to lead in solving complex problems for Oregon while creating excellent learning opportunities for students. Specifically, this program will train a new generation of ocean literate leaders with skills for navigating diverse professional fields with publicly engaged, multidisciplinary, and practical views and experiences.

Approaches to social and environmental problems require creative partnerships, scholarship that is ethical and interdisciplinary, and learning that is mindful of and accountable to the communities and environments with which it engages. Informed, publicly engaged citizens prepared to lead, act, and collaborate in the service of their communities and the earth's natural ecosystems are essential to our future. The marine studies major offers students coursework, experiential learning opportunities, and faculty mentorships that prepare them to tackle social, economic, and environmental issues with creativity and awareness.

Need for the Program

The growth of coastal and ocean economies, the significant share of the world's population living in coastal zones, and increasing public awareness of ocean issues are driving students to pursue learning about marine issues. There are a few different informational sources providing evidence for market demand to sustain this degree program. For example, in the US in 2016, the ocean economy employed more people than the sum of employments in the sectors of crop production, telecommunications, and building construction (NOAA, 2019. "NOAA Report on the US Ocean and Great Lakes Economy," <https://coast.noaa.gov/data/digitalcoast/pdf/econ-report.pdf>). On the academic side, the challenge is the relative paucity of analogous degree programs nationwide.

Two needs assessments offer evidence of the market viability of the proposed program: an evaluation by EAB that used qualitative interviews with administrators of peer programs coupled with quantitative analysis of regional and national trends in similar degree programs and in the labor market; and a survey of currently enrolled OSU students by the OSU Policy Analysis Laboratory (OPAL).

Program Financials

The proposed BA/BS in Marine Studies will be net revenue positive at the end of a 5-year growth period, following initial investments from the Marine Studies Initiative (MSI) Office in program development in the first four years. Initial investments in faculty and administration offset to a significant degree by revenues derived from student credit hour (SCH) generation. As the number of students in the new marine studies degree increases and SCH revenues increase, there will be opportunity for additional faculty to deliver instructional and supervisory needs.

Year 1 (FY2021) will require support from the MSI Office/CLA (\$52K) to provide recruiting materials, equipment, and research resources (library). In Year 2 (FY2022), the projected revenue stream from SCH and degree completions covers a larger overall share of the increasing costs due to expanded FTE (a little under 1.0) and the needed central support funds drop to \$30K. The trend continues in Year 3 (FY2023) with the addition of another 0.50 FTE in tenure-stream faculty, another 0.25 FTE added to the advisor/internship coordinator, and 0.49 FTE in instructor line faculty. The revenue stream as projected supports reducing central support to \$10K. Year 4 (FY2024) planning includes an additional bump in instructor FTE (another 0.50 to make the total of instructor FTE 2.0), the addition of 0.49 FTE in tenure-stream faculty (bringing it to 1.49 FTE and making the total of MAST degree-dedicated instructional faculty FTE 3.49). Year 4 also sees the doubling of advising/internship FTE to 1.0. These increases in personnel to meet projected demand means the required central support funds bump up for the year to \$42K. However, in year 5 (FY2025), when degree completions hit target and all projected positions and other costs have been filled, the program has its first anticipated year with a positive balance (\$32K). In summary, after a few years of anticipated investments in ramping up, the new marine studies degree should be net revenue positive for CLA.

The budget is summarized in the table below.

	Academic Year 2021-22	Academic Year 2022-23	Academic Year 2023-24	Academic Year 2024-25
COSTS				
Personnel				
Faculty (T/TT & fixed term) & Staff	\$106,655	\$152,112	\$230,464	\$322,264
OPE	\$62,300	\$91,174	\$137,771	\$193,151
Personnel Subtotal	\$168,955	\$243,285	\$368,235	\$515,416
Other Resources				
Library printed/electronic	\$8000	\$6000	\$4000	\$500
Services & Supplies: office supplies, postage, professional development, student workers, student transportation to coast	\$13,200	\$9800	\$8900	\$10,100
Other Resources Subtotal	\$21,200	\$15,800	\$12,900	\$10,600
TOTAL COSTS	\$190,155	\$259,085	\$381,135	\$526,016

INCOME/SUPPORT				
Tuition & Degree Conferrals*	\$137,700	\$228,397	\$371,030	\$484,265
MSI Support	\$52,455	\$30,688	\$10,105	\$41,751
TOTAL INCOME/SUPPORT	\$190,155	\$259,085	\$381,135	\$526,016

*In its fifth year (AY 2025-26) projected tuition and degree conferrals will generate revenue sufficient to fully cover projected program costs. \$534,312 (expenditures) v. \$566,720 (revenue) based on current budget model and projected enrollments.

RECOMMENDATION

All appropriate university committees and the OSU Faculty Senate have positively reviewed the proposed program. The Provost recommends that the Academic Strategies Committee approve the establishment of a BA/BS in Marine Studies, effective winter 2021, pending support of the Statewide Provosts Council and the approval of the Higher Education Coordinating Commission.